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## **CLAIMS**

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1. A quinoline derivative of the Formula I

$$(R^1)_m$$
 $Z^2 - R^{14}$ 
 $(R^3)_n$ 

wherein  $\mathbb{Z}^1$  is an O, S, SO, SO<sub>2</sub>, N(R<sup>2</sup>) or C(R<sup>2</sup>)<sub>2</sub> group, wherein each R<sup>2</sup> group, which may be the same or different, is hydrogen or (1-6C)alkyl;

m is 0, 1, 2, 3 or 4;

each R<sup>1</sup> group, which may be the same or different, is selected from halogeno, trifluoromethyl, cyano, isocyano, nitro, hydroxy, mercapto, amino, formyl, carboxy, carbamoyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulphinyl, (1-6C)alkylsulphonyl,

- 15 (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N.N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, (3-6C)alkenoylamino, N-(1-6C)alkyl-(3-6C)alkynoylamino, N-(1-6C)alkyl-(3-6C)alkynoylamino, N-(1-6C)alkylsulphamoyl, N.N-di-[(1-6C)alkyl]sulphamoyl, (1-6C)alkanesulphonylamino,
- 20  $\underline{N}$ -(1-6C)alkyl-(1-6C)alkanesulphonylamino or from a group of the formula :

$$Q^1-X^1-$$

wherein X<sup>1</sup> is a direct bond or is selected from O, S, SO, SO<sub>2</sub>, N(R<sup>4</sup>), CO, CH(OR<sup>4</sup>), CON(R<sup>4</sup>), N(R<sup>4</sup>)CO, SO<sub>2</sub>N(R<sup>4</sup>), N(R<sup>4</sup>)SO<sub>2</sub>, OC(R<sup>4</sup>)<sub>2</sub>, SC(R<sup>4</sup>)<sub>2</sub> and N(R<sup>4</sup>)C(R<sup>4</sup>)<sub>2</sub>, wherein R<sup>4</sup> is hydrogen or (1-6C)alkyl, and Q<sup>1</sup> is aryl, aryl-(1-6C)alkyl, (3-7C)cycloalkyl, (3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl-(1-6C)alkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl, or (R<sup>1</sup>)<sub>m</sub> is (1-3C)alkylenedioxy,

and wherein adjacent carbon atoms in any (2-6C)alkylene chain within a R¹ substituent are optionally separated by the insertion into the chain of a group selected from O, S, SO, SO<sub>2</sub>, N(R<sup>5</sup>), CO, CH(OR<sup>5</sup>), CON(R<sup>5</sup>), N(R<sup>5</sup>)CO, SO<sub>2</sub>N(R<sup>5</sup>), N(R<sup>5</sup>)SO<sub>2</sub>, CH=CH and C≡C wherein R<sup>5</sup> is hydrogen or (1-6C)alkyl or, when the inserted group is N(R<sup>5</sup>), R<sup>5</sup> may also be 5 (2-6C)alkanoyl,

and wherein any CH<sub>2</sub>=CH- or HC≡C- group within a R<sup>1</sup> substituent optionally bears at the terminal CH<sub>2</sub>= or HC≡ position a substituent selected from halogeno, carboxy, carbamoyl, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, NN-di-[(1-6C)alkyl]carbamoyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di-[(1-6C)alkyl]amino-(1-6C)alkyl or from a group of the formula:

$$Q^2-X^2-$$

wherein  $X^2$  is a direct bond or is selected from CO and  $N(R^6)$ CO, wherein  $R^6$  is hydrogen or (1-6C)alkyl, and  $Q^2$  is aryl, aryl-(1-6C)alkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl,

- and wherein any CH, CH<sub>2</sub> or CH<sub>3</sub> group within a R<sup>1</sup> substituent optionally bears on each said CH, CH<sub>2</sub> or CH<sub>3</sub> group one or more halogeno or (1-6C)alkyl substituents or a substituent selected from hydroxy, cyano, amino, carboxy, carbamoyl, (1-6C)alkoxy, (1-6C)alkylthio, (1-6C)alkylsulphinyl, (1-6C)alkylsulphonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl,
- N.N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulphamoyl, N.N-di-[(1-6C)alkyl]sulphamoyl, (1-6C)alkanesulphonylamino, N-(1-6C)alkyl-(1-6C)alkanesulphonylamino or from a group of the formula:

$$-X^{3}-O^{3}$$

- wherein X³ is a direct bond or is selected from O, S, SO, SO<sub>2</sub>, N(R<sup>7</sup>), CO, CH(OR<sup>7</sup>), CON(R<sup>7</sup>), N(R<sup>7</sup>)CO, SO<sub>2</sub>N(R<sup>7</sup>), N(R<sup>7</sup>)SO<sub>2</sub>, C(R<sup>7</sup>)<sub>2</sub>O, C(R<sup>7</sup>)<sub>2</sub>S and N(R<sup>7</sup>)C(R<sup>7</sup>)<sub>2</sub>, wherein R<sup>7</sup> is hydrogen or (1-6C)alkyl, and Q³ is aryl, aryl-(1-6C)alkyl, (3-7C)cycloalkyl, (3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl-(1-6C)alkyl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl,
- and wherein any aryl, heteroaryl or heterocyclyl group within a substituent on R<sup>1</sup> optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from halogeno, trifluoromethyl, cyano, nitro, hydroxy, amino, carboxy, carbamoyl, (1-6C)alkyl,

(2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulphinyl, (1-6C)alkylsulphonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N-(1-6C)alkylcarbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulphamoyl, N-(1-6C)alkylsulphamoyl, (1-6C)alkylsulphamino, N-(1-6C)alkyl-(1-6C)alkylsulphamino, N-(1-6C)alkylsulphamino, N-(1-6C)alkylsulphamino or from a group of the formula:

$$-X^{4}-R^{8}$$

wherein X<sup>4</sup> is a direct bond or is selected from O and N(R<sup>9</sup>), wherein R<sup>9</sup> is hydrogen or

(1-6C)alkyl, and R<sup>8</sup> is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkyl, (1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di-[(1-6C)alkyl]amino-(1-6C)alkyl, (2-6C)alkanoylamino-(1-6C)alkyl or (1-6C)alkoxycarbonylamino-(1-6C)alkyl or from a group of the formula:

$$-X^{5}-O^{4}$$

wherein X<sup>5</sup> is a direct bond or is selected from O, N(R<sup>10</sup>) and CO, wherein R<sup>10</sup> is hydrogen or (1-6C)alkyl, and Q<sup>4</sup> is aryl, aryl-(1-6C)alkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl which optionally bears 1 or 2 substituents, which may be the same or different, selected from halogeno, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl and (1-6C)alkoxy,

and wherein any heterocyclyl group within a substituent on R<sup>1</sup> optionally bears 1 or 2 oxo or thioxo substituents;

n is 0, 1, 2 or 3;

each R<sup>3</sup> group is halogeno, trifluoromethyl, cyano, nitro, hydroxy, amino, carboxy, carbamoyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy,

- 25 (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulphinyl, (1-6C)alkylsulphonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N-(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, (3-6C)alkenoylamino, N-(1-6C)alkyl-(3-6C)alkynoylamino, N-(1-6C)alkyl-(3-6C)alky
- 30 <u>N</u>-(1-6C)alkylsulphamoyl, <u>N,N</u>-di-[(1-6C)alkyl]sulphamoyl, (1-6C)alkanesulphonylamino, <u>N</u>-(1-6C)alkyl-(1-6C)alkanesulphonylamino or from a group of the formula:

$$-X^{6}-R^{11}$$

wherein X<sup>6</sup> is a direct bond or is selected from O and N(R<sup>12</sup>), wherein R<sup>12</sup> is hydrogen or (1-6C)alkyl, and R<sup>11</sup> is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkyl, (1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl) or di-[(1-6C)alkyl]amino-(1-6C)alkyl;

 $\mathbb{Z}^2$  is a C $\equiv$ C or C(R<sup>13</sup>)=C(R<sup>13</sup>) group, wherein each R<sup>13</sup> group, which may be the same or different, is hydrogen or (1-6C)alkyl; and

R<sup>14</sup> is selected from halogeno, cyano, isocyano, formyl, carboxy, carbamoyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, N-(1-6C)alkylcarbamoyl, N-(1-6C)alkylcarbamoyl, (2-6C)alkanoyl, N-(1-6C)alkylsulphamoyl, N-(1-6C)alkylsulphamoyl, halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di-[(1-6C)alkyl]amino-(1-6C)alkyl, (2-6C)alkanoylamino-(1-6C)alkyl, (1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkyl, (1-6C)alkyl)

$$-X^{7}-O^{5}$$

wherein X<sup>7</sup> is a direct bond or is selected from CO, CH(OR<sup>15</sup>), CON(R<sup>15</sup>) or SO<sub>2</sub>N(R<sup>15</sup>), wherein R<sup>15</sup> is hydrogen or (1-6C)alkyl, and Q<sup>5</sup> is aryl, aryl-(1-6C)alkyl, (3-7C)cycloalkyl, (3-7C)cycloalkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein any CH, CH<sub>2</sub> or CH<sub>3</sub> group within a R<sup>14</sup> substituent optionally bears on

20 each said CH, CH<sub>2</sub> or CH<sub>3</sub> group one or more halogeno or (1-6C)alkyl substituents or a

substituent selected from hydroxy, cyano, amino, carboxy, carbamoyl, (1-6C)alkoxy,

(1-6C)alkylthio, (1-6C)alkylsulphinyl, (1-6C)alkylsulphonyl, (1-6C)alkylamino,

di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl,

N-N-di-[(1-6C)alkyl]carbamoyl, (2-6C)alkanoyl, (2-6C)alkanoyloxy, (2-6C)alkanoylamino,

N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulphamoyl, N-N-di-[(1-6C)alkyl]
sulphamoyl, (1-6C)alkanosulphonylamino, N-(1-6C)alkyl-(1-6C)alkanosulphonylamino or

from a group of the formula:

$$-X_8-Q_6$$

wherein X<sup>8</sup> is a direct bond or is selected from O, S, SO, SO<sub>2</sub>, N(R<sup>16</sup>), CO, CH(OR<sup>16</sup>),

CON(R<sup>16</sup>), N(R<sup>16</sup>)CO, SO<sub>2</sub>N(R<sup>16</sup>), N(R<sup>16</sup>)SO<sub>2</sub>, C(R<sup>16</sup>)<sub>2</sub>O, C(R<sup>16</sup>)<sub>2</sub>S and N(R<sup>16</sup>)C(R<sup>16</sup>)<sub>2</sub>,

wherein R<sup>16</sup> is hydrogen or (1-6C)alkyl, and Q<sup>6</sup> is aryl, aryl-(1-6C)alkyl, (3-7C)cycloalkyl,

(3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl, (3-7C)cycloalkenyl-(1-6C)alkyl,

heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl,

and wherein any aryl, heteroaryl or heterocyclyl group within a substituent on R<sup>14</sup> optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from halogeno, trifluoromethyl, cyano, nitro, hydroxy, amino, carboxy, carbamoyl, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl, (1-6C)alkoxy, (2-6C)alkenyloxy, (2-6C)alkynyloxy, (1-6C)alkylthio, (1-6C)alkylsulphinyl, (1-6C)alkylsulphonyl, (1-6C)alkylamino, di-[(1-6C)alkyl]amino, (1-6C)alkoxycarbonyl, N-(1-6C)alkylcarbamoyl, (2-6C)alkanoylamino, N-(1-6C)alkyl-(2-6C)alkanoylamino, N-(1-6C)alkylsulphamoyl, N,N-di-[(1-6C)alkyl]-sulphamoyl, (1-6C)alkanoylamino, N-(1-6C)alkyl

10 (1-6C)alkanesulphonylamino or from a group of the formula:

$$-X^9-R^{17}$$

wherein X<sup>9</sup> is a direct bond or is selected from O and N(R<sup>18</sup>), wherein R<sup>18</sup> is hydrogen or (1-6C)alkyl, and R<sup>17</sup> is halogeno-(1-6C)alkyl, hydroxy-(1-6C)alkyl, (1-6C)alkyl, (1-6C)alkyl, cyano-(1-6C)alkyl, amino-(1-6C)alkyl, (1-6C)alkylamino-(1-6C)alkyl, di-[(1-6C)alkyl]amino-(1-6C)alkyl, (2-6C)alkanoylamino-(1-6C)alkyl, (1-6C)alkoxycarbonylamino-(1-6C)alkyl, or from a group of the formula:

$$-X^{10}-Q^7$$

wherein X<sup>10</sup> is a direct bond or is selected from O, N(R<sup>19</sup>) and CO, wherein R<sup>19</sup> is hydrogen or (1-6C)alkyl, and Q<sup>7</sup> is aryl, aryl-(1-6C)alkyl, heteroaryl, heteroaryl-(1-6C)alkyl, heterocyclyl or heterocyclyl-(1-6C)alkyl which optionally bears 1 or 2 substituents, which may be the same or different, selected from halogeno, (1-6C)alkyl, (2-8C)alkenyl, (2-8C)alkynyl and (1-6C)alkoxy,

and wherein any heterocyclyl group within a substituent on R<sup>14</sup> optionally bears 1 or 2 oxo or thioxo substituents;

- 25 or a pharmaceutically-acceptable salt thereof.
  - 2. A quinoline derivative of the Formula I, or a pharmaceutically acceptable salt thereof, according to claim 1 wherein  $R^1$ ,  $R^3$ ,  $Z^1$ ,  $Z^2$ , m and n have any of the meanings defined in claim 1 and
- R<sup>14</sup> is selected from cyano, formyl, carboxy, carbamoyl, methoxycarbonyl, vinyl, ethoxycarbonyl, <u>N</u>-methylcarbamoyl, <u>N</u>-ethylcarbamoyl, <u>NN</u>-dimethylcarbamoyl, <u>NN</u>-dimethylcarbamoyl, chloromethyl,

2-chloroethyl, 3-chloropropyl, hydroxymethyl, 2-hydroxyethyl, 3-hydroxypropyl, methoxymethyl, 2-methoxyethyl, 3-methoxypropyl or from a group of the formula:

$$-X^{7}-Q^{5}$$

wherein X<sup>7</sup> is a direct bond or CO and Q<sup>5</sup> is pyridin-2-yl, 1-pyrrolidinyl, morpholino, 1,1-5 dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-yl, piperidino, 1-homopiperidinyl, piperazin-1-yl, homopiperazin-1-yl,1-pyrrolidinylmethyl, morpholinomethyl, piperidinomethyl, 1homopiperidinylmethyl, 1,1-dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-ylmethyl, piperazin-1-ylmethyl, homopiperazin-1-ylmethyl or 3-morpholinopropyl,

and wherein any CH<sub>2</sub> or CH<sub>3</sub> group within a R<sup>14</sup> substituent optionally bears on each said CH<sub>2</sub> or CH<sub>3</sub> group one or more fluoro, chloro or methyl groups or a substituent selected from hydroxy, amino, methoxy, methylamino, dimethylamino, acetoxy, acetamido and N-methylacetamido,

and wherein any heteroaryl or heterocyclyl group within a substituent on R<sup>14</sup> optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from hydroxy,

amino, carbamoyl, methyl, ethyl, allyl, 2-propynyl, methoxy, methylsulphonyl, N-methylcarbamoyl,

 $\underline{N},\underline{N}$ -dimethylcarbamoyl and acetyl, or optionally bears 1 substituent selected from a group of the formula:

$$-X^9-R^{17}$$

wherein X<sup>9</sup> is a direct bond and R<sup>17</sup> is 2-fluoroethyl, 2-hydroxyethyl, 3-hydroxypropyl, 2-methoxyethyl, 3-methoxypropyl, cyanomethyl, aminomethyl, methylaminomethyl, dimethylaminomethyl, acetamidomethyl, methoxycarbonylaminomethyl, ethoxycarbonylaminomethyl or tert-butoxycarbonylaminomethyl,

and wherein any heterocyclyl group within a substituent on  $\mathbb{R}^{14}$  optionally bears 1 or 2 oxo substituents.

A quinoline derivative of the Formula I according to claim 1 wherein:
 Z<sup>1</sup> is O or NH;

m is 1 and the R<sup>1</sup> group is located at the 5-, 6- or 7-position or m is 2 and each R<sup>1</sup>
group, which may be the same or different, is located at the 5- and 7-positions or at the 6- and 7-positions and R<sup>1</sup> is selected from hydroxy, amino, methyl, ethyl, propyl, butyl, methoxy, ethoxy, propoxy, isopropoxy, butoxy, pent-4-ynyloxy, hex-5-ynyloxy, methylamino, ethylamino, dimethylamino, diethylamino, acetamido, propionamido, 2-imidazol-1-ylethoxy,

2-(1,2,4-triazol-1-yl)ethoxy, tetrahydrofuran-3-yloxy, tetrahydropyran-4-yloxy, 2-pyrrolidin-1-ylethoxy, 3-pyrrolidin-1-ylpropoxy, 4-pyrrolidin-1-ylbutoxy, pyrrolidin-3-yloxy, pyrrolidin-2-ylmethoxy, 2-pyrrolidin-2-ylethoxy, 3-pyrrolidin-2-ylpropoxy, 2-morpholinoethoxy, 3-morpholinopropoxy, 4-morpholinobutoxy, 5 2-(1,1-dioxotetrahydro-4H-1,4-thiazin-4-yl)ethoxy, 3-(1,1-dioxotetrahydro-4H-1,4-thiazin-4-yl)propoxy, 2-piperidinoethoxy, 3-piperidinopropoxy, 4-piperidinobutoxy,

piperidin-3-yloxy, piperidin-4-yloxy, piperidin-3-ylmethoxy, piperidin-4-ylmethoxy, 2-piperidin-3-ylethoxy, 3-piperidin-3-ylpropoxy, 2-piperidin-4-ylethoxy,

3-piperidin-4-ylpropoxy, 2-homopiperidin-1-ylethoxy, 3-homopiperidin-1-ylpropoxy,

10 2-piperazin-1-ylethoxy, 3-piperazin-1-ylpropoxy, 4-piperazin-1-ylbutoxy, 2-homopiperazin-1-ylethoxy and 3-homopiperazin-1-ylpropoxy,

and wherein adjacent carbon atoms in any (2-6C)alkylene chain within a R<sup>1</sup> substituent are optionally separated by the insertion into the chain of a group selected from O, NH, N(Me), CH=CH and C≡C,

and wherein any CH<sub>2</sub> or CH<sub>3</sub> group within a R<sup>1</sup> substituent optionally bears on each 15 said CH2 or CH3 group one or more fluoro or chloro groups or a substituent selected from hydroxy, amino, methoxy, methylsulphonyl, methylamino, dimethylamino, diethylamino,  $\underline{N}$ -ethyl- $\underline{N}$ -methylamino,  $\underline{N}$ -isopropyl- $\underline{N}$ -methylamino,  $\underline{N}$ -methyl- $\underline{N}$ -propylamino and acetoxy, and wherein any heteroaryl or heterocyclyl group within a substituent on R1 optionally

20 bears 1 or 2 substituents, which may be the same or different, selected from fluoro, chloro, trifluoromethyl, hydroxy, amino, carbamoyl, methyl, ethyl, methoxy, N-methylcarbamoyl and N,N-dimethylcarbamoyl and a pyrrolidin-2-yl, piperidin-3-yl, piperidin-4-yl, piperazin-1-yl or . homopiperazin-1-yl group within a R<sup>1</sup> substituent is optionally N-substituted with allyl. methylsulphonyl, acetyl, 2-fluoroethyl, 3-fluoropropyl, 2-methoxyethyl, 3-methoxypropyl,

25 cyanomethyl, 2-aminoethyl, 3-aminopropyl, 2-methylaminoethyl, 3-methylaminopropyl, 2-dimethylaminoethyl, 3-dimethylaminopropyl, 2-pyrrolidin-1-ylethyl, 3-pyrrolidin-1-ylpropyl, 2-morpholinoethyl, 3-morpholinopropyl, 2-piperidinoethyl, 3-piperidinopropyl, 2-piperazin-1-ylethyl or 3-piperazin-1-ylpropyl, the last 8 of which substituents each optionally bears 1 or 2 substituents, which may be the same or different, 30 selected from fluoro, chloro, methyl and methoxy,

and wherein any heterocyclyl group within a substituent on R<sup>1</sup> optionally bears 1 or 2 oxo substituents:

n is 0 or 1 and the R<sup>3</sup> group, if present, is located at the 5- or 6-position of the 1,3-benzodioxol-4-yl group and is selected from fluoro, chloro, bromo, trifluoromethyl, cyano, hydroxy, methyl, ethyl, vinyl, allyl, ethynyl, methoxy and ethoxy;

 $Z^2$  is a C=C or CH=CH group; and

- R<sup>14</sup> is selected from cyano, formyl, carboxy, carbamoyl, methoxycarbonyl, vinyl, ethoxycarbonyl, <u>N</u>-methylcarbamoyl, <u>N</u>-ethylcarbamoyl, <u>N,N</u>-dimethylcarbamoyl, <u>N</u>-ethyl-<u>N</u>-methylcarbamoyl, <u>N,N</u>-diethylcarbamoyl, acetyl, propionyl, chloromethyl, 2-chloroethyl, 3-chloropropyl, hydroxymethyl, 2-hydroxyethyl, 3-hydroxypropyl, methoxymethyl, 2-methoxyethyl, 3-methoxypropyl, cyanomethyl, 2-cyanoethyl,
- 3-cyanopropyl, methylaminomethyl, ethylaminomethyl, 2-methylaminoethyl, 3-methylaminopropyl, 2-ethylaminoethyl, 3-ethylaminopropyl, dimethylaminomethyl, 2-dimethylaminoethyl, 3-dimethylaminopropyl, acetamidomethyl, 2-acetamidoethyl and 3-acetamidopropyl, or from a group of the formula:

$$-X^{7}-Q^{5}$$

- wherein X<sup>7</sup> is a direct bond or CO and Q<sup>5</sup> is pyridin-2-yl, 1-pyrrolidinyl, morpholino, 1,1-dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-yl, piperidino, 1-homopiperidinyl, piperazin-1-yl, homopiperazin-1-yl, 1-pyrrolidinylmethyl, morpholinomethyl, piperidinomethyl, 1-homopiperidinylmethyl, 1,1-dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-ylmethyl, piperazin-1-ylmethyl, homopiperazin-1-ylmethyl or 3-morpholinopropyl,
- and wherein any CH<sub>2</sub> or CH<sub>3</sub> group within a R<sup>14</sup> substituent optionally bears on each said CH<sub>2</sub> or CH<sub>3</sub> group one or more fluoro, chloro or methyl groups or a substituent selected from hydroxy, amino, methoxy, methylamino, dimethylamino, acetoxy, acetamido and N-methylacetamido,

and wherein any heteroaryl or heterocyclyl group within a substituent on R<sup>14</sup> optionally bears 1, 2 or 3 substituents, which may be the same or different, selected from hydroxy, amino, carbamoyl, methyl, ethyl, allyl, 2-propynyl, methoxy, methylsulphonyl, N-methylcarbamoyl,

<u>N,N</u>-dimethylcarbamoyl and acetyl, or optionally bears 1 substituent selected from a group of the formula:

$$-X^9-R^{17}$$

wherein X<sup>9</sup> is a direct bond and R<sup>17</sup> is 2-hydroxyethyl, 3-hydroxypropyl, 2-methoxyethyl, 3-methoxypropyl, cyanomethyl, aminomethyl, methylaminomethyl, dimethylaminomethyl,

acetamidomethyl, methoxycarbonylaminomethyl, ethoxycarbonylaminomethyl or <u>tert</u>-butoxycarbonylaminomethyl,

and wherein any heterocyclyl group within a substituent on  $\mathbb{R}^{14}$  optionally bears 1 or 2 oxo substituents;

or a pharmaceutically-acceptable acid-addition salt thereof.

4. A quinoline derivative of the Formula I, or a pharmaceutically acceptable salt thereof, according to claim 1 wherein  $R^1$ ,  $R^3$ ,  $R^{14}$ ,  $Z^2$ , m and n have any of the meanings defined in claim 1 and  $Z^1$  is NH.

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- 5. A quinoline derivative of the Formula I, or a pharmaceutically acceptable salt thereof, according to claim 1 wherein  $R^1$ ,  $R^3$ ,  $R^{14}$ ,  $Z^1$ , m and n have any of the meanings defined in claim 1 and  $Z^2$  is a C=C group.
- 6. A quinoline derivative of the Formula I, or a pharmaceutically acceptable salt thereof, according to claim 1 wherein R<sup>1</sup>, R<sup>3</sup>, R<sup>14</sup>, Z<sup>1</sup>, Z<sup>2</sup>, m and n have any of the meanings defined in claim 1 and the Z<sup>2</sup>-R<sup>14</sup> group is located at the 7-position on the 1,3-benzodioxol-4-yl group.
  - 7. A quinoline derivative of the Formula I according to claim 1 wherein: Z<sup>1</sup> is NH;

m is 2 and the first  $R^1$  group is a 6-methoxy group and the second  $R^1$  group is located at the 7-position and is selected from methoxy, ethoxy, 2-fluoroethoxy, 2-chloroethoxy,

- 3-fluoropropoxy, 3-chloropropoxy, 2-(2-chloroethoxy)ethoxy, 2-(2-methoxyethoxy)ethoxy,
- 2-pyrrolidin-1-ylethoxy, 3-pyrrolidin-1-ylpropoxy, 2-morpholinoethoxy,
- 3-morpholinopropoxy, 2-(1,1-dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-yl)ethoxy,
  3-(1,1-dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-yl)propoxy, 2-piperidinoethoxy,
  3-piperidinopropoxy, 2-(4-methylpiperazin-1-yl)ethoxy, 3-(4-methylpiperazin-1-yl)propoxy,
  3-(4-allylpiperazin-1-yl)propoxy, 3-(4-methylsulphonylpiperazin-1-yl)propoxy,
  3-(4-acetylpiperazin-1-yl)propoxy, 2-(4-cyanomethylpiperazin-1-yl)ethoxy,
- 30 3-(4-cyanomethylpiperazin-1-yl)propoxy, 2-[4-(2-fluoroethyl)piperazin-1-yl]ethoxy, 3-[4-(2-fluoroethyl)piperazin-1-yl]propoxy, 2-(3-oxopiperazin-1-yl)ethoxy, 3-(3-oxopiperazin-1-yl)propoxy, 2-(2-pyrrolidin-1-ylethoxy)ethoxy and 2-fluoro-3-(4-hydroxypiperidin-1-yl)propoxy;

n is 0 or n is 1 and  $\mathbb{R}^3$  is a fluoro or chloro group located at the 5-position of the 1,3-benzodioxol-4-yl group;

the  $-Z^2-R^{14}$  group is located at the 7-position on the 1,3-benzodioxol-4-yl group,  $Z^2$  is a C=C group; and

R<sup>14</sup> is selected from vinyl, hydroxymethyl, methoxymethyl, dimethylaminomethyl, pyridin-2-yl, 1-pyrrolidinylmethyl, morpholinomethyl, piperidinomethyl, 1,1-dioxotetrahydro-4<u>H</u>-1,4-thiazin-4-ylmethyl and piperazin-1-ylmethyl;

or a pharmaceutically-acceptable acid-addition salt thereof.

10 8. A quinoline derivative of the Formula I according to claim 1 wherein Z<sup>1</sup> is NH;

m is 2 and the first  $R^1$  group is located at the 5-position and is selected from N-methylpiperidin-4-yloxy and tetrahydro-2H-pyran-4-yloxy and the second  $R^1$  group is located at the 7-position and is selected from methoxy and 3-morpholinopropoxy,

- n is 0 or n is 1 and R<sup>3</sup> is located at the 5-position of the
  - 1,3-benzodioxol-4-yl group and is a chloro group;

the  $-Z^2-R^{14}$  group is located at the 7-position on the 1,3-benzodioxol-4-yl group,  $Z^2$  is a C=C group; and

R<sup>14</sup> is selected from methoxymethyl and 2-methoxyethyl;

- 20 or a pharmaceutically-acceptable acid-addition salt thereof.
  - 9. A quinoline derivative of the Formula I according to claim 1 and selected from 7-[3-(4-acetylpiperazin-1-yl)propoxy]-3-cyano-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
- 25 3-cyano-6,7-dimethoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline; 3-cyano-6,7-dimethoxy-4-[6-chloro-4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-7-ethoxy-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino] quinoline;
- 30 3-cyano-7-{3-[4-(2-fluoroethyl)piperazin-1-yl]propoxy}-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-6-methoxy-7-[3-(4-methylpiperazin-1-yl)propoxy]-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;

- 3-cyano-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]-7-[3-morpholinopropoxy]quinoline;
- 4-[6-chloro-4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]-3-cyano-6-methoxy-7-[3-morpholinopropoxy]quinoline;
- 5 3-cyano-7-[3-(1,1-dioxotetrahydro-4<u>H</u>-thiazin-4-yl)propoxy]-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-7-(2-fluoroethoxy)-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]-7-[3-(3-
- 10 oxopiperazin-1-yl)propoxy]quinoline;
  - 3-cyano-6-methoxy-4-[6-chloro-4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]-7-[3-(3-oxopiperazin-1-yl)propoxy]quinoline;
  - 3-cyano-6-methoxy-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]-
  - 7-[2-(2-pyrrolidin-1-ylethoxy)ethoxy]quinoline;
- 15 3-cyano-6-methoxy-7-[2-(2-methoxyethoxy)ethoxy]-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-4-[6-chloro-4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]-7-methoxy-5-[(1-methylpiperidin-4-yl)oxy]quinoline;
  - 3-cyano-7-methoxy-5-[(1-methylpiperidin-4-yl)oxy]-4-[4-(3-methoxyprop-1-ynyl)-2,3-
- 20 methylenedioxyanilino]quinoline;
  - 3-cyano-7-(3-morpholin-4-ylpropoxy)-5-(tetrahydro-2H-pyran-4-yloxy)-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-7-methoxy-4-[4-(4-methoxybut-1-ynyl)-2,3-methylenedioxyanilino]-5-[(1-methylpiperidin-4-yl)oxy]quinoline;
- 4-[(4-but-3-en-1-ynyl-2,3-methylendioxy)anilino]-3-cyano-7-methoxy-5-[(1-methylpiperidin-4-yl)oxy]quinoline;
  - 3-cyano-6-methoxy-7-[3-(4-methylpiperazin-1-yl)propoxy]- 4-[6-fluoro-4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-6-methoxy-7-[2-fluoro-3-(4-hydroxypiperidin-1-yl)propoxy]- 4-[4-(3-methoxyprop-
- 30 1-ynyl)-2,3-methylenedioxyanilino]quinoline;
  - 3-cyano-6-methoxy-7-[3-(4-methylpiperazin-1-yl)propoxy]-4-[4-(3-methoxyprop-1-ynyl)-2,3-methylenedioxyanilino]quinoline; and
  - 3-cyano-6,7-dimethoxy-4-[4-(pyridin-2-ylethynyl)-2,3-methylenedioxyanilino]quinoline,

or a pharmaceutically acceptable acid addition salt thereof.

- 10.. A process for the preparation of a quinoline derivative of the Formula I, or a pharmaceutically-acceptable salt thereof, according to claim 1 which comprises:-
- for the production of those compounds of the Formula I wherein  $Z^1$  is an O, S or  $N(R^2)$  group, the reaction of a quinoline of the Formula II

wherein L is a displaceable group and m and R<sup>1</sup> have any of the meanings defined in claim 1 except that any functional group is protected if necessary, with a compound of the Formula III

$$(R^3)_n$$
  $Z^2 - R^{14}$   $HZ^1$   $O$   $III$ 

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wherein Z<sup>1</sup> is O, S, or N(R<sup>2</sup>) and n, R<sup>3</sup>, R<sup>2</sup>, Z<sup>2</sup> and R<sup>14</sup> have any of the meanings defined in claim 1 except that any functional group is protected if necessary, whereafter any protecting group that is present is removed by conventional means;

(b) for the production of those compounds of the Formula I wherein at least one R<sup>1</sup> group is a group of the formula

$$Q^1-X^1-$$

wherein Q<sup>1</sup> is an aryl-(1-6C)alkyl, (3-7C)cycloalkyl-(1-6C)alkyl, (3-7C)cycloalkenyl(1-6C)alkyl, heteroaryl-(1-6C)alkyl or heterocyclyl-(1-6C)alkyl group or an optionally substituted alkyl group and X<sup>1</sup> is an oxygen atom, the coupling, conveniently in the presence of a suitable dehydrating agent, of a quinoline of the Formula V

$$Z^2$$
  $R^{14}$ 
 $Z^1$ 
 $(R^1)_m$ 
 $(R^3)_n$ 
 $V$ 

wherein m, R<sup>1</sup>, Z<sup>1</sup>, n, R<sup>3</sup>, Z<sup>2</sup> and R<sup>14</sup> have any of the meanings defined in claim 1 except that any functional group is protected if necessary, with an appropriate alcohol of the formula Q<sup>1</sup>-OH wherein any functional group is protected if necessary, whereafter any protecting group that is present is removed by conventional means:

- (c) for the production of those compounds of the Formula I wherein R<sup>1</sup> is an amino-substituted (1-6C)alkoxy group, the reaction of a compound of the Formula I wherein R<sup>1</sup> is a halogeno-substituted (1-6C)alkoxy group with a heterocyclyl compound or an appropriate amine;
- 10 (d) for the production of those compounds of the Formula I wherein an R<sup>1</sup> group contains a (1-6C)alkoxy or substituted (1-6C)alkoxy group or a (1-6C)alkylamino or substituted (1-6C)alkylamino group, the alkylation, conveniently in the presence of a suitable base of a quinoline derivative of the Formula I, wherein the R<sup>1</sup> group contains a hydroxy group or a primary or secondary amino group;
- 15 (e) for the production of those compounds of the Formula I wherein Z<sup>1</sup> is a SO or SO<sub>2</sub> group, wherein an R<sup>1</sup> or R<sup>3</sup> substituent is a (1-6C)alkylsulphinyl or (1-6C)alkylsulphonyl group or wherein an R<sup>1</sup>, R<sup>3</sup> or R<sup>14</sup> substituent contains a SO or SO<sub>2</sub> group, the oxidation of a compound of Formula I wherein Z<sup>1</sup> is a S group or wherein an R<sup>1</sup> or R<sup>3</sup> substituent is a (1-6C)alkylthio group or wherein an R<sup>1</sup> R<sup>3</sup> or R<sup>14</sup> substituent contains a S group;
- 20 (f) the reaction of a compound of the Formula VI

$$(R^1)_m$$
 $(R^3)_n$ 
 $VI$ 

wherein L is a displaceable group and m,  $R^1$ ,  $Z^1$ , n and  $R^3$  have any of the meanings defined in claim 1 except that any functional group is protected if necessary, with a compound of the Formula VII

HZ<sup>2</sup>—— R<sup>14</sup> VII

wherein  $Z^2$  is a C=C or  $C(R^{13})$ = $C(R^{13})$  group and  $R^{13}$  and  $R^{14}$  have any of the meanings defined in claim 1 except that any functional group is protected if necessary, whereafter any protecting group that is present is removed by conventional means;

- (g) for the production of a compound of the Formula I wherein  $R^{14}$  is a carboxy group, the cleavage of a compound of the Formula I wherein  $R^{14}$  is a (1-6C)alkoxycarbonyl group;
  - (h) the reaction of a compound of the Formula I wherein  $R^{14}$  is a carboxy group with an appropriate amine to form a further compound of the Formula I wherein  $R^{14}$  is a carbamoyl,  $\underline{N}$ -(1-6C)alkylcarbamoyl,  $\underline{N}$ -di-[(1-6C)alkyl]carbamoyl or heterocyclylcarbonylamino group;

and when a pharmaceutically-acceptable salt of a quinoline derivative of the Formula I is required it may be obtained using a conventional procedure.

- 11. A pharmaceutical composition which comprises a quinoline derivative of the Formula I, or a pharmaceutically-acceptable salt thereof, according to claim 1 in association with a
  20 pharmaceutically-acceptable diluent or carrier.
  - 12. A quinoline derivative of the Formula I, or a pharmaceutically-acceptable salt thereof, according to claim 1 for use in a method of the treatment of the human or animal body by therapy.

- 13. A quinoline derivative of the Formula I, or a pharmaceutically-acceptable salt thereof, according to claim 1 for use in the treatment of cancer.
- 14. The use of a quinoline derivative of the Formula I, or a pharmaceutically-acceptable salt thereof, according to claim 1 in the manufacture of a medicament for use as an anti-invasive agent in the containment and/or treatment of solid tumour disease.
- 15. The use of a quinoline derivative of the Formula I, or a pharmaceutically-acceptable salt thereof, according to claim 1 in the manufacture of a medicament for use as an anti-proliferative agent in the containment and/or treatment of solid tumour disease.

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